

## Appendix A

### Test Setups (Photographs)

NOTE: All photographs are representative of setup for maximum emissions.

Photograph of Test Setup:  
Output Power and The Ratio of the Peak Excursion of the Modulation Envelope to the Peak Transmit Power



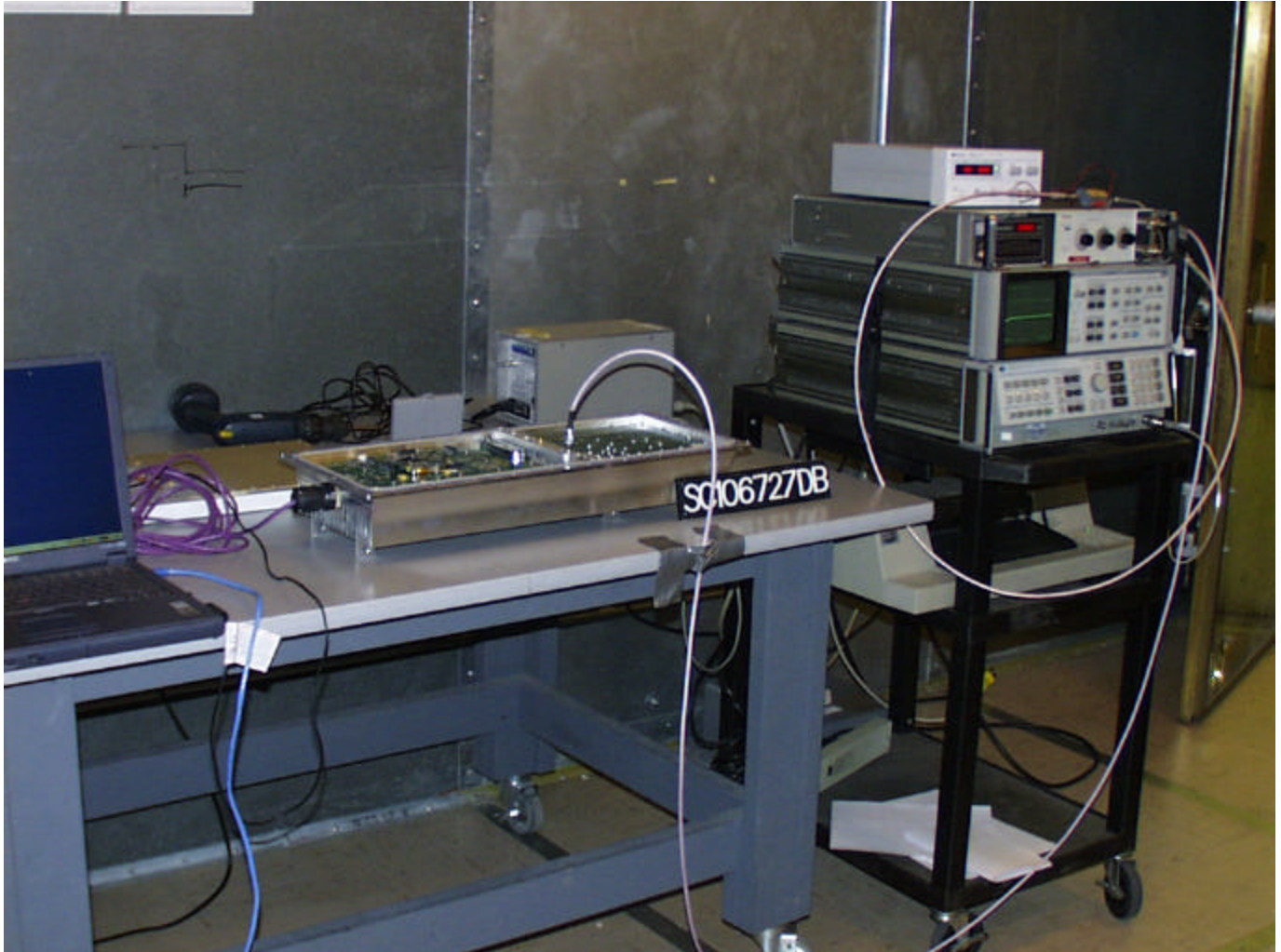
Photograph of Test Setup:  
26 dB Bandwidth

Photograph not available. See Technical Documentation, page TD112 for test setup.

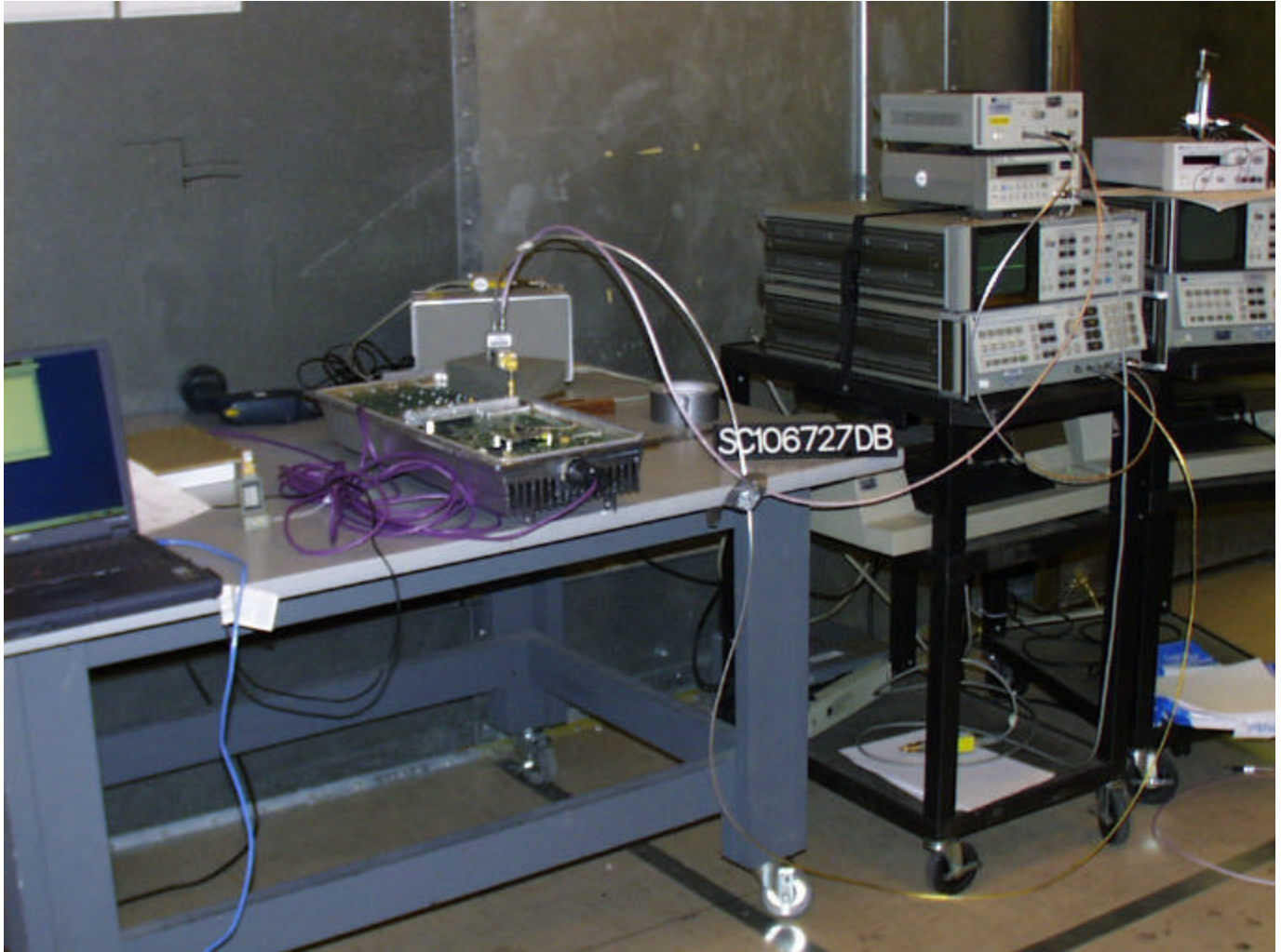
Photograph of Test Setup:  
Power Density

Photograph not available. See Technical Documentation, page TD112 for test setup.

Photograph of Test Setup:  
Out of Band Antenna Conducted Emissions



Photograph of Test Setup:  
Out of Band Antenna Conducted Emissions



Photograph of Test Setup:  
Band Edge Antenna Conducted Emissions

Photograph not available. See Technical Documentation, page TD112 for test setup.

Photograph of Test Setup:  
Radiated Emission in Restricted Bands and Radiated Emission from Receiver L.O.

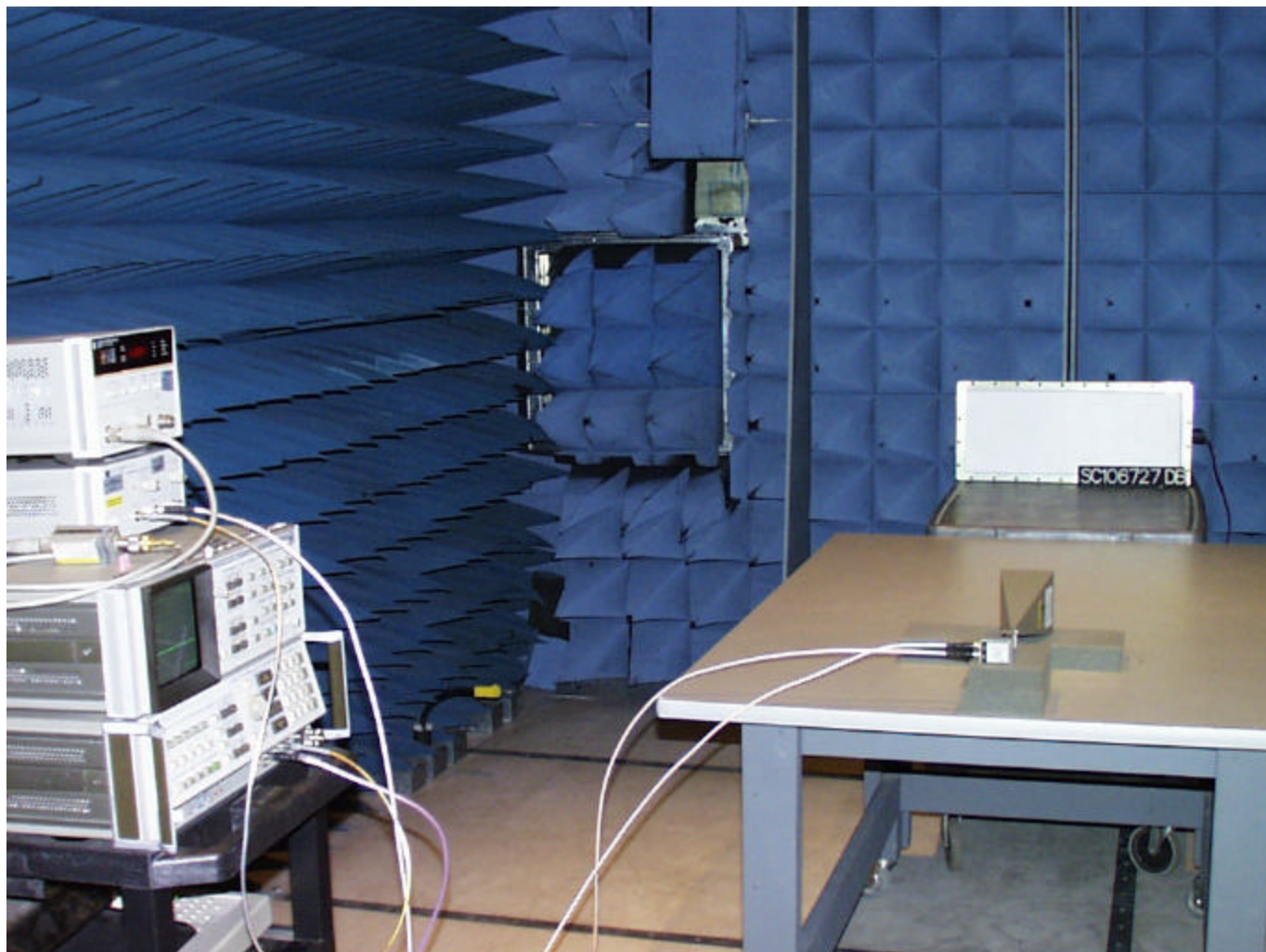




Photograph of Test Setup:  
Radiated Emission in Restricted Bands and Radiated Emission from Receiver L.O.



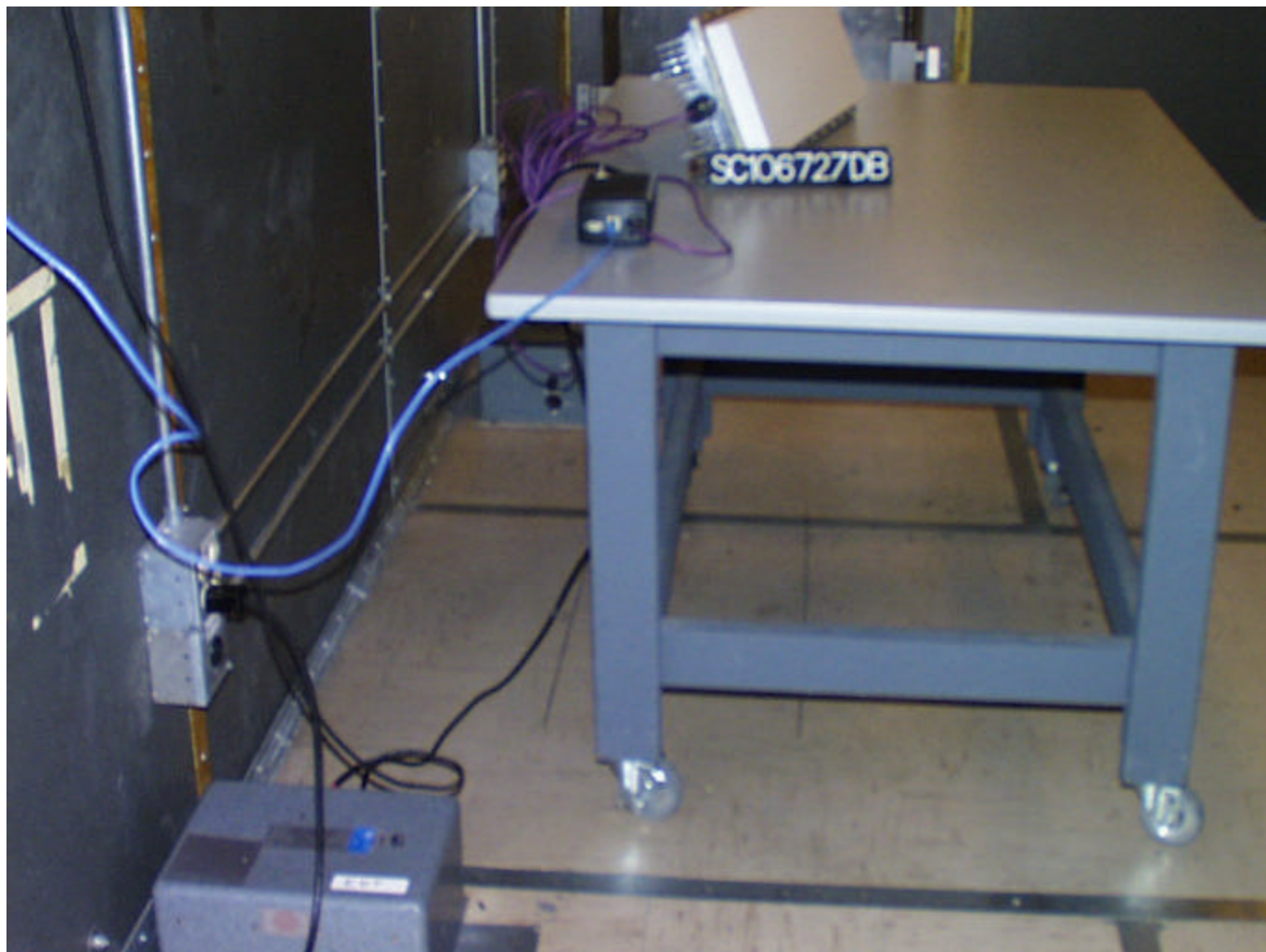
Photograph of Test Setup:  
Radiated Emission in Restricted Bands



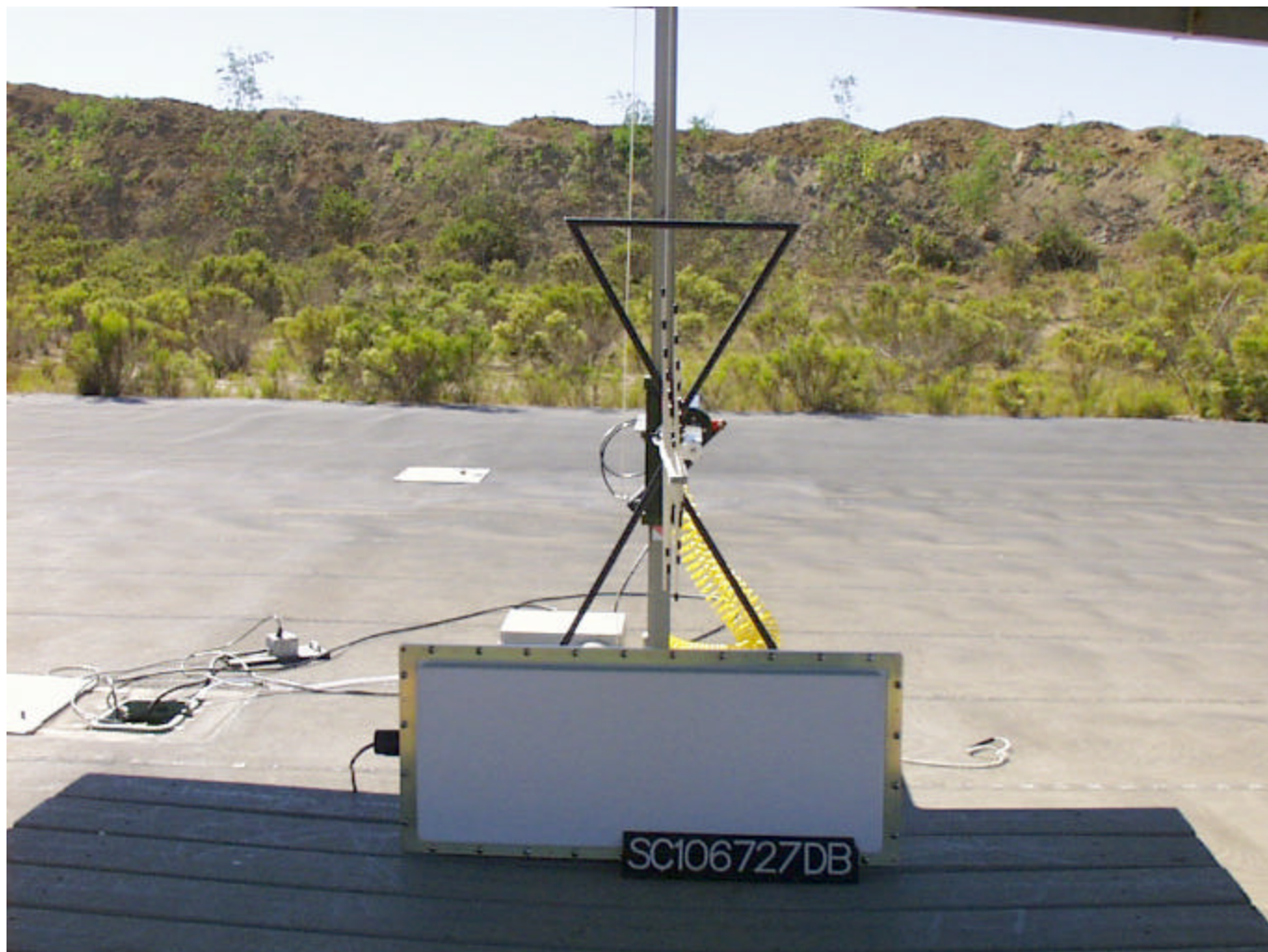
Photograph of Test Setup:  
AC Conducted Emission



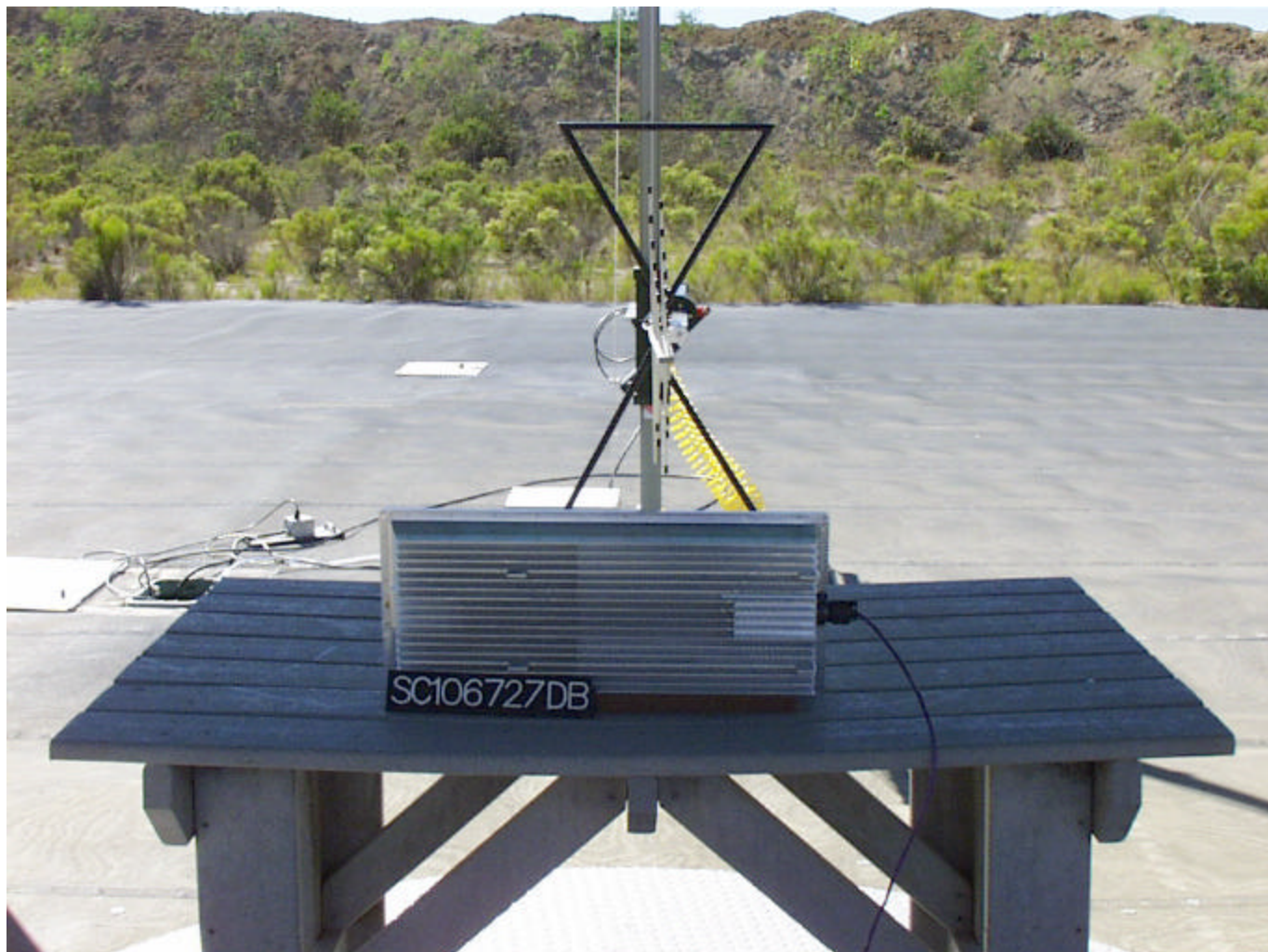
Photograph of Test Setup:  
AC Conducted Emission



Photograph of Test Setup:  
Radiated Emission from Digital Part



Photograph of Test Setup:  
Radiated Emission from Digital Part



## Appendix B

Product Information Form(s)

**General Equipment Description -- NOTE: This information will be input into your test report as shown below.**

EUT Description: Point -to-multipoint Base Station with integrated antenna of 18+/-1 dBi gain.  
 EUT Name: UNII Radio FCC ID: HZB-US58-B60  
 Model No.: 40400-XX Serial No.: ENGR UNIT #1  
 Product Options: mdl 40400: 20, 30, 40, & 60Mbps; mdl 40400: 20Mbps only  
 Configurations to be tested: mdl 40400: 20, 30, 40, & 60 Mbps

**Power Requirements**

*Regulations require testing to be performed at typical power ratings in the countries of intended use. (i.e., European power is typically 230 VAC 50 Hz or 400 VAC 50 Hz, single and three phase, respectively)*

Voltage: 120 VAC (If battery powered, make sure battery life is sufficient to complete testing.)  
 # of Phases: 1  
 Current (Amps/phase(max)): 2.5 Current (Amps/phase(nominal)): 1  
 Other: --

**Other Special Requirements**

--

**Typical Installation and/or Operating Environment**

(ie. Hospital, Small Business, Industrial/Factory, etc.)

Small business

**EUT Power Cable**

Permanent OR  Removable Length (in meters): 1 to 100m  
 Shielded OR  Unshielded  
 Not Applicable



EUT Interface Ports and Cables												
Interface				Shielding								
Type	Analog	Digital	Qty	Yes	No	Type	Termination	Connector Type	Port Termination	Length (in meters)	Removable	Permanent
<b>EXAMPLE:</b> RS232	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Foil over braid	Coaxial	Metallized 9-pin D-Sub	Characteristic Impedance	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cat5 UTP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	--	Crimp	RJ-45	Cat-5	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**EUT Software.**

Revision Level: 4.6

Description: Software can be manually configured by an external computer to use the desired frequency channel and modulation mode (QPSK, 8QAM, or 16QAM).

**EUT Operating Modes to be Tested** -- list the operating modes to be used during test. It is recommended the equipment be tested while operating in a typical operation mode. FCC testing of personal computers and/or peripherals requires that a simple program generate a complete line of upper case H's. Provide a general description of all software, firmware, and PLD algorithms used in the equipment. List all code modules as described above, with the revision level used during testing. Consult with your TÜV Product Service Representative if additional assistance is required.

1. QPSK-3/4 modulation (30Mbps mode): frequency channels 0, 3, & 5 (lowest, mid, highest)
2. 8QAM modulation (40Mbps mode): frequency channels 0, 3, & 5 (lowest, mid, highest)
3. 16QAM modulation (60Mbps mode): frequency channels 0, 3, & 5 (lowest, mid, highest)

**EUT System Components** -- List and describe all components which are part of the EUT. For FCC testing a minimum configuration is required. (ie. Mouse, Printer, Monitor, External Disk Drive, Motherboard, etc.)

Description	Model #	Serial #	FCC ID #
Base Station	40400	1	--
Axiom 3V GPS Antenna with SMA Coax ~15 Ft.	--	--	--

**Support Equipment** -- List and describe all support equipment which is not part of the EUT. (i.e. peripherals, simulators, etc)

Description	Model #	Serial #	FCC ID #
HP Omnibook laptop	4150	TW01400612	--

**Oscillator Frequencies**

Frequency	Derived Frequency	Component # / Location	Description of Use
--			

**Power Supply**

Manufacturer	Model #	Serial #	Type
Skynet	WLH-A07T	001132458	<input checked="" type="checkbox"/> Switched-mode: (Frequency) -- <input type="checkbox"/> Linear <input type="checkbox"/> Other: --

**Power Line Filters**

Manufacturer	Model #	Location in EUT
--		

**Critical EMI Components (Capacitors, ferrites, etc.)**

Description	Manufacturer	Part # or Value	Qty	Component # / Location
--				

**EMC Critical Detail** -- Describe other EMC Design details used to reduce high frequency noise.

--

**30 October 2001**

Page 1 - Changes: Title; model number; company name; total pages  
Page 6 - Changes: Test location; equipment and note  
Page 17 - General Remarks  
TD2 - Ch 5 frequency  
TD3 - Added attestation sheet for bandwidth test  
TD4 - TD6 - Exchanged data records  
Appendix C - Added page

**23 March 2002**

TD77 - TD94 - Added addition plots for out of band emissions. Test data provided by customer.